Influence of Measurement Condition on Magnetic Parameters of Construction Steel

Karol Hilko^{1, c)}, Daniel Škarbala^{1, b)} and Vladimír Jančárik^{1, a)}

¹ Faculty of Electrical Engineering, Slovak University of Technology, Ilkovičova 3, 81219 Bratislava, Slovakia

a) Corresponding author: vladimir.jancarik@stuba.sk b) danskarb@gmail.com c) karol.hilko@stuba.sk

Abstract. The work is focused on investigation of the influence of magnetic field intensity waveform on the measurement of magnetic parameters and Barkhausen noise of Charpy-shaped structural steel samples on an open magnetic circuit. A digital feedback algorithm providing a defined waveform of the magnetic field intensity in the sample is presented.